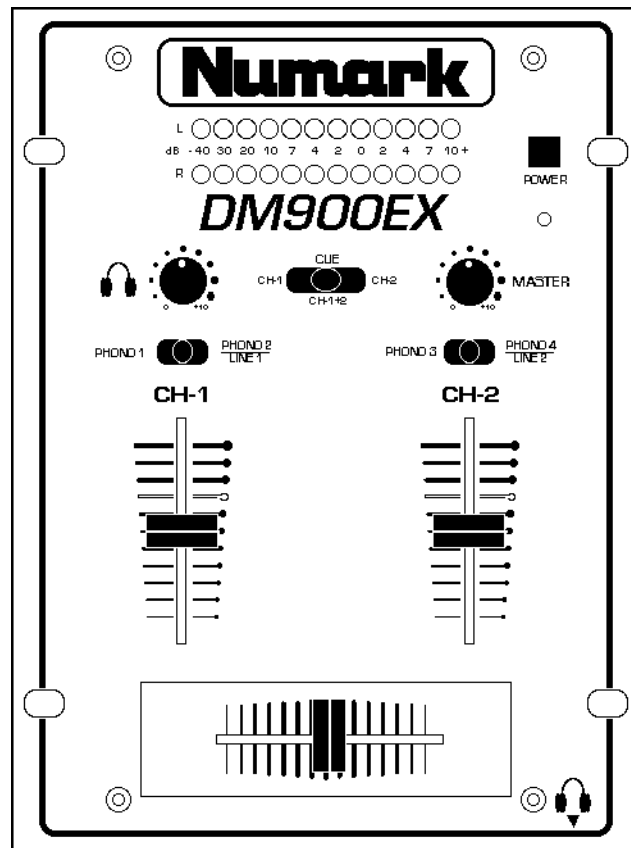


# Numark

Professional Disc Jockey Products

## DM900EX

# OWNER'S MANUAL



## **CONGRATULATIONS!**

You have purchased the **DM900EX** Stereo Mixer by **Numark**. This equipment features all new circuitry and the latest in manufacturing and design technology to give you greater quality and better reliability than ever before. The **DM900EX** brings to you the finest quality of DJ equipment available today.

***Thank you for buying Numark DJ products!***

### ***FEATURES...***

- *Compact design*
- *User replaceable assignable ALPs™ crossfader*
- *Gold Plated Connectors*
- *4 phono inputs*
- *2 switchable line inputs*
- *Tape Out for direct recording*
- *Powerful stereo headphone output*
- *Selectable cueing*
- *High-end performance audio signal*

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# NUMARK DM900 STEREO MIXER



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# Safety Information and Product Registration

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE ANY COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.</p> <p>The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p> <p>The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying this appliance.</p>		

<b>CAUTION</b>
FOR USA & CANADIAN MODELS ONLY
TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

## SAFETY INSTRUCTIONS

1. **Read Instructions** - All the safety and operating instructions should be read before this product is connected and used.
2. **Retain Instructions** - The safety and operating instructions should be kept for future reference.
3. **Heed Warnings** - All warnings on this product and in these operating instructions should be followed.
4. **Follow Instructions** - All operating and other instructions should be followed.

5. **Water and Moisture** - This product should be kept away from direct contact with liquids.

6. **Heat** - Avoid placing this product too close to any high heat sources such as radiators.

7. **Power Sources** - This product should be connected to a power supply only of the type described in these operating instructions, or as marked on the unit.

8. **Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked upon or pinched by items placed on or against them. When removing the cord from a power outlet be sure to remove it by holding the plug attachment and not by pulling on the cord.

9. **Object and Liquid Entry** - Take care that objects do not fall into and that liquids are not spilled into the inside of the mixer.

10. **Damage Requiring Service** - This product should be serviced only by qualified personnel. If you have any questions about service please contact **Numark** at the number(s) shown on the back cover of this manual.

11. **Grounding or Polarization** - Precautions should be taken so that the grounding or polarization means built into the mixer is not defeated.

**NOTE:** This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Electrical equipment should NEVER be kept or stored in damp environments.

Please record the serial number of your unit as shown on the back of the chassis as well as the name of the dealer from whom you purchased the unit. Retain this information for your records. Please return the warranty card enclosed to register your mixer with us.

MODEL: <b>DM900</b>	PURCHASED FROM: _____
SERIAL NUMBER: _____	DATE OF PURCHASE: _____

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## IMPORTANT INFORMATION...

*Please read this entire manual before connecting the DM900 to your system.*

*For optimum performance:*

- Always make sure that AC power is OFF while making any connections.
- Do not use excessively long cables (i.e. over 50ft/14m) Be sure plugs and jacks are tightly mated. Loose connections can cause hum, noise or intermittents that could easily damage your speakers.
- Never use spray cleaners on the slide controls. Residues cause excessive dirt build-up and this will void your warranty. In normal use slide controls can last for many years. If they malfunction (usually because of a dirty or dusty environment) consult a professional technician.
- Never attempt to make any adjustments or repairs other than those described in this manual. Take the **DM900** to your dealer or to an authorized **Numark** Service Center.

### A NOTE ON CABLES:

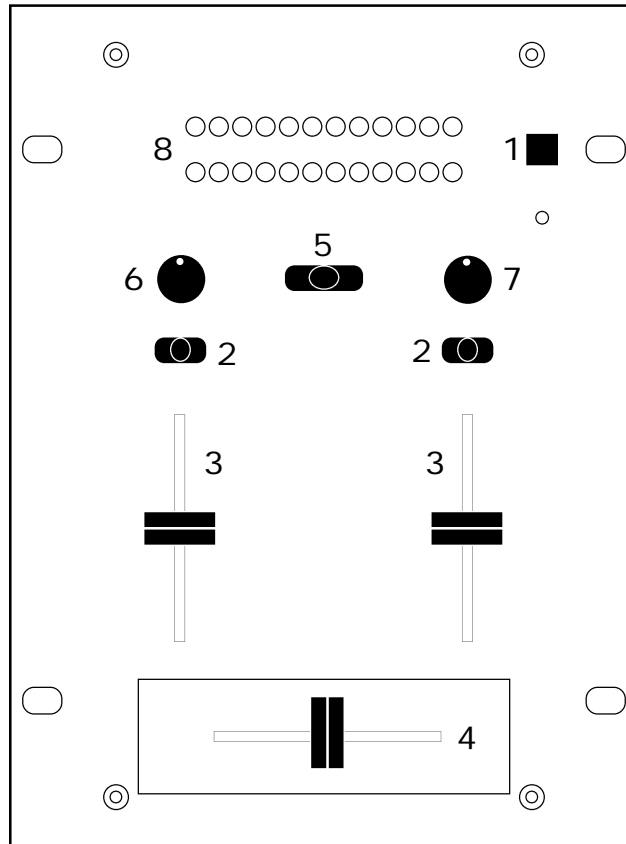
Make the input and output connections with readily available *low-capacitance* stereo cables. Quality cable makes a *big* difference in audio fidelity and punch. See your **Numark** dealer or an electronics or audio specialist store if you are not sure which cables to get.

## SYSTEM PRECAUTIONS

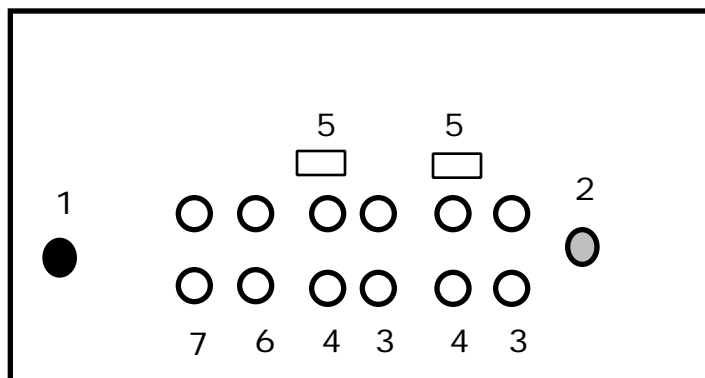
- Use appropriate cables throughout your system: Quality shielded audio cables and terminated shielded video cables, low-capacitance preferred. Speaker cables must be 14-gauge minimum; 12- or 10-gauge is better.
- Reliability will be enhanced through the use of banana connectors on the speaker wires. Observe correct speaker wire polarity. If in doubt, consult your **Numark** dealer or a qualified technician.
- Take care to connect only one cable at a time. Pay attention to the color-coded, labelled Input and Output jacks.
- ALWAYS remember: ***“TURN AMPS ON LAST AND OFF FIRST”***. Begin with master faders or volume controls on minimum and the amplifier gain/input control(s) down. Wait 8 to 10 seconds before turning up the volume. This prevents transients which may cause severe speaker damage.
- Use restraint when operating controls. Try to move them slowly. Rapid adjustments could damage speakers due to amplifier clipping.
- **Avoid amplifier “clipping” at all costs:** this occurs when the red LEDs (usually on the front panel of most professional power amplifiers) start flashing. **“Clipping”** is when the power amplifier is distorting and working beyond it’s limits. Amplifier distortion is THE major cause of speaker failure.
- To prevent fire or shock hazard, do not expose the unit to rain or moisture. **Never place cans of beer, soda, glasses of water or anything wet on top of the mixer!**

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*DM900EX FRONT PANEL DIAGRAM...*



*DM900EX REAR PANEL DIAGRAM...*



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## GUIDED TOUR OF FEATURES AND OPERATING INSTRUCTIONS...

If the **DM900** is your first mixer, please read this entire manual before you begin operation.

If you are an experienced DJ, simply replace your old mixer. The **DM900** can be rack-mounted or used as a free-standing unit (four 6" rack unit spaces).

### INSTALLATION AND OPERATION

Study the **Connections Diagram** on page 13. First, connect all stereo input sources. Next connect your monitor headphones. Make sure all faders are at "zero" and the unit is off. Finally, connect the stereo outputs to the power amplifier(s) and/or audio sources. Plug the **DM900** into its power supply and plug this into power. Now you are ready to switch it on.

#### 1. **Power Switch** and **Power-On LED**.

The **DM900** is divided into five functional blocks: Input, Crossfader, Monitoring, and Master Output. It is important to learn how each of these work.

### CHANNEL INPUTS SECTION

2. **Channels 1 & 2 Input Toggle Switches** select which source will be live to that channel based on what you have connected to the rear panel input section.

3. The **Input Faders** are low-noise, low-impedance, high-quality, smooth Alps™ faders. These control individual source levels in the mix.

### CROSSFADER SECTION

4. The **Replaceable Crossfader** achieves clean segues between the two input channels.



"Hard left" selects Channel 1. "Hard right" selects Channel 2. With the crossfader centered both assigned channels are live. Use the crossfader for fast and seamless segues from one selected channel to the other.

**Note:** The crossfader is user replaceable in case of failure. Simply unscrew the two large screws which hold it in place, lift it out and disconnect its cable. Re-attach the new crossfader and screw the mounting plate back onto the unit - you're back in business!

### MONITOR SECTION

5. **Channel Cue Assign**. The **Cue** selector is used to route channel audio to the **Monitor Section**. The channel faders do not control the **Cue** volume.

6. **Headphone Volume** controls the output level to the **Headphone Jack** located on the front panel of the mixer. Connect headphones with a standard 1/4" stereo plug. The **Cue** audio is sent to the headphone amp using the **Cue Assign Selector**.

### MASTER OUTPUT SECTION

7. The **Stereo Master Fader** controls the Master output level.

8. The **LED METER** indicates the Master output level.

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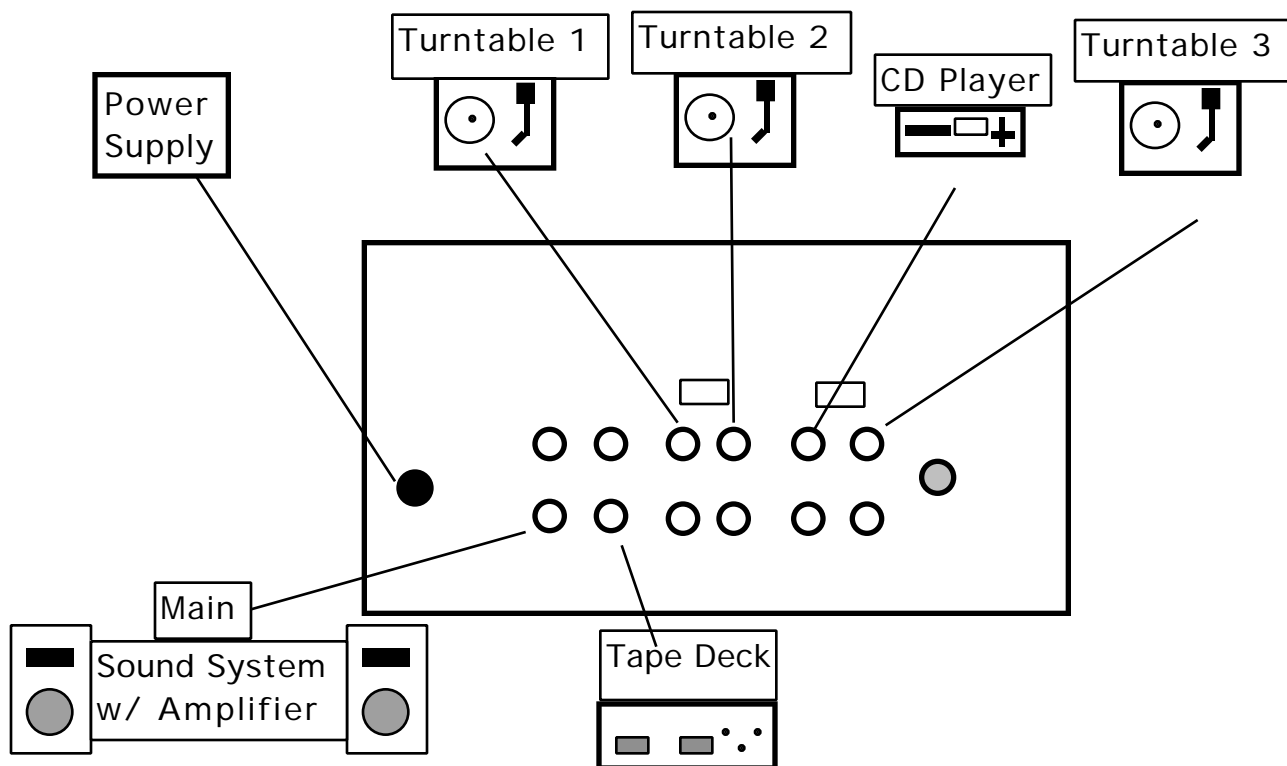
## **REAR PANEL: INPUTS AND OUTPUTS**

(Please refer to diagram on page 7)

1. **Power Input.** Plug your external power supply into here. See safety precautions on page 3 for proper treatment of the power cord.
2. **GND** is the grounding lug for all turntables. Always use this connection (your turntable cable should have a grounding wire).
3. **Phono Inputs on Channels 1, 2 and 3** use unbalanced RCA jacks. Your input signal is fed directly to the **DM900**'s high-quality RIAA phono pre-amplifiers so use this position only for moving magnet cartridges. Line level sources will overload the sensitive phono pre-amps and will sound very bad, so always be sure to toggle the line/phono switch over to line before connection of line sources.
4. **Channels 1 & 2 Line Inputs** are unbalanced RCA jacks. The **Line Input** is selected with the toggle switch on the front panel.  
You can connect stereo audio from HiFi VCRs, cassette and reel-to-reel tape decks, DAT machines, CD players, laser discs, tuners, even synthesizers or other mixing consoles.  
**NOTE:** Plug mono audio sources into both Left and Right inputs using a "Y" cable connector.
5. **Line/Phono Input switch.** Use this to allow line level equipment to be plugged into your phono inputs giving you a total of 8 line input options.
6. The **Tape Outputs** are low-impedance unbalanced RCA jacks which output the program mix and allow you to connect any recording device.
7. The **Stereo Master Outputs** are low-impedance RCA connectors controlled by the **Master** fader.



DM900EX CONNECTION DIAGRAM...



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## ***SPECIFICATIONS...***

### **INPUTS:**

Line: 47k input impedance  
100mV rms sensitivity (for 1.22 V output)

Phono: 47k input impedance  
1.5 mV rms sensitivity @ 1 KHz (for 1.22 V output)

### **OUTPUTS:**

Line: 7.2V rms max (+19 dBm)

Headphone Amp: .5 watt into 47

Distortion less than .01%

### **SIGNAL TO NOISE RATIOS (vs. maximum output):**

Line: Better than 88 dB  
Phono: Better than 78 dB

### **FREQUENCY RESPONSE:**

Line: 20 Hz- 20k Hz  $\pm$  .5 dB  
Phono:  $\pm$  1 dB except for controlled attenuation of -3 dB  
@ 20 Hz to reduce rumble and feedback

### **POWER CONSUMPTION:**

8 Watt typical, 10 watt with full headphone output

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*BLOCK DIAGRAM...*

# **Numark**

## ***Professional Disc Jockey Products***

### **Warranty and Service Information**

Numark Industries, LLC and Numark International, Inc. (hereafter "Numark") warrants each new product manufactured and/or supplied by it to be free from defects in material or workmanship under conditions of normal use and service for 360 days, beginning on the date of purchase from an authorized Numark Dealer, but not to exceed 2 years from date of shipment by Numark.

The Numark obligation under this warranty is limited to repairing or replacing, at its option, the product or part(s) therein; which upon examination by Numark shall appear to be defective or not up to factory specifications; providing the Numark product is returned (transportation prepaid) to Numark.

Numark shall not be liable for any damages, consequential or otherwise, resulting from the use and operation of this product and makes no other warranty(s) either express or implied on this product, including any warranty of merchantability.

This warranty does not extend to any of our products which have been subjected to misuse, neglect, accident, incorrect wiring not our own, improper installation, or use in violation of instructions furnished by us, nor extended to units which have been repaired or altered outside of our factory, nor to cases where the serial number thereof has been removed, defaced, or changed, nor to accessories used therewith not of our own manufacture. Numark reserves the right to make changes or improvements in its products, during subsequent production, without incurring the obligation to install such changes or improvements on previously manufactured equipment.

To place this warranty into effect, the enclosed WARRANTY REGISTRATION CARD must be returned to Numark Industries, LLC within thirty (30) days after date of purchase.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

#### **EQUIPMENT TRANSPORT**

A Return Authorization number should be obtained from Numark through the addresses or phone numbers below.

It is the customer's obligation, when returning faulty equipment, to properly pack the Numark equipment in its original packaging. Failure to do so may inadequately protect the equipment in transit and, therefore, jeopardize the customer's warranty. The defective Numark equipment should be sent, FREIGHT PREPAID with Return Authorization number to:

**NUMARK INDUSTRIES**  
**11 Helmsman Road**  
**North Kingstown, RI 02852 U.S.A.**  
**Attention: Service Department**

**Telephone: +1 (401) 946-4700**  
**Fax: +1 (401) 946-5350**  
**E-mail: numark@numark.com**